

FIG. 1

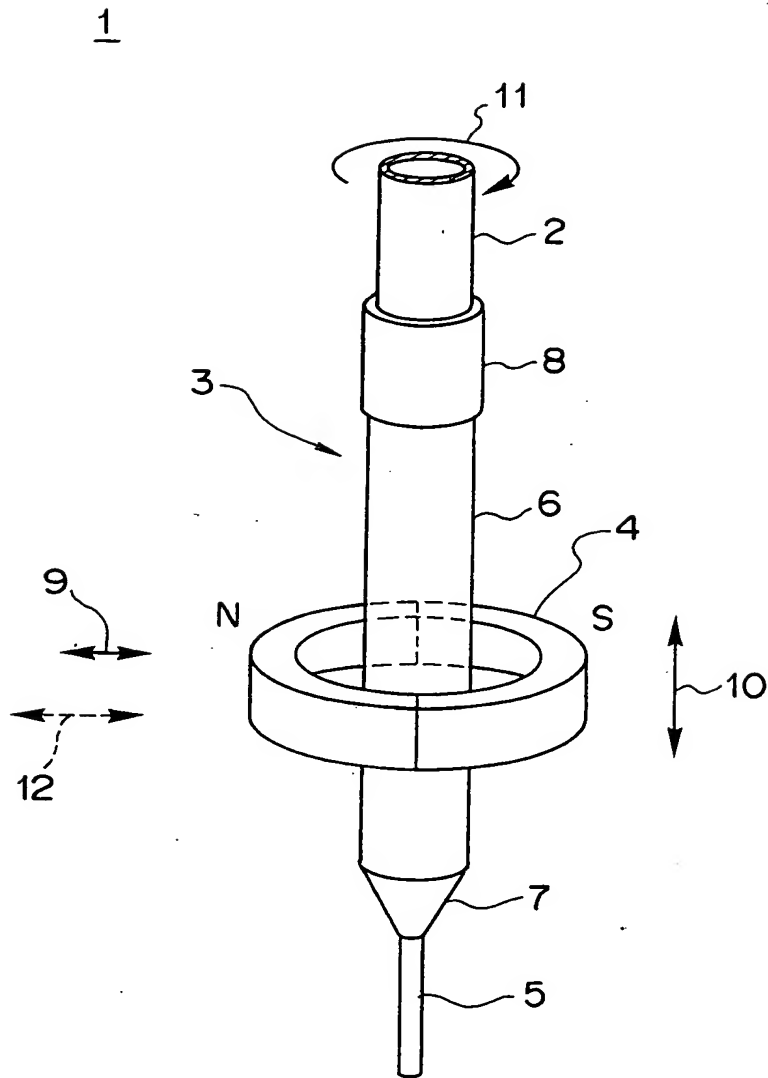


FIG. 2

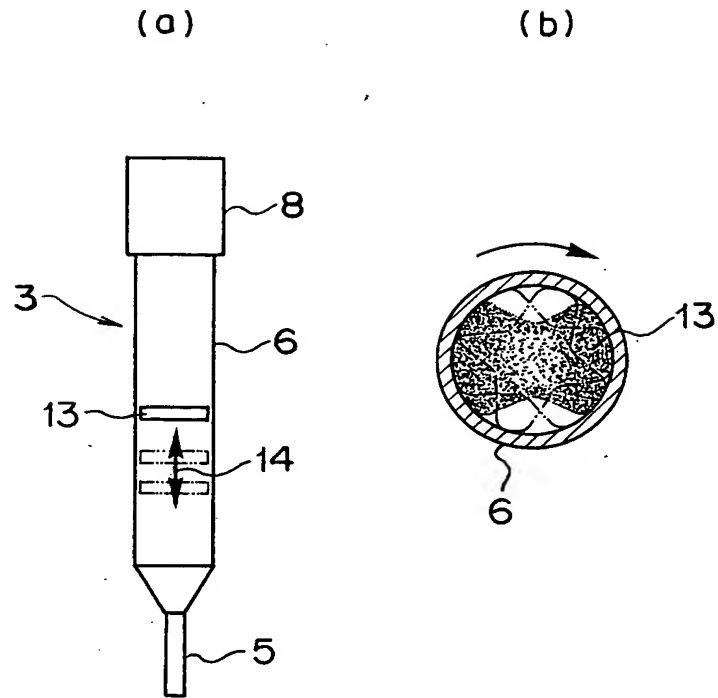


FIG. 3

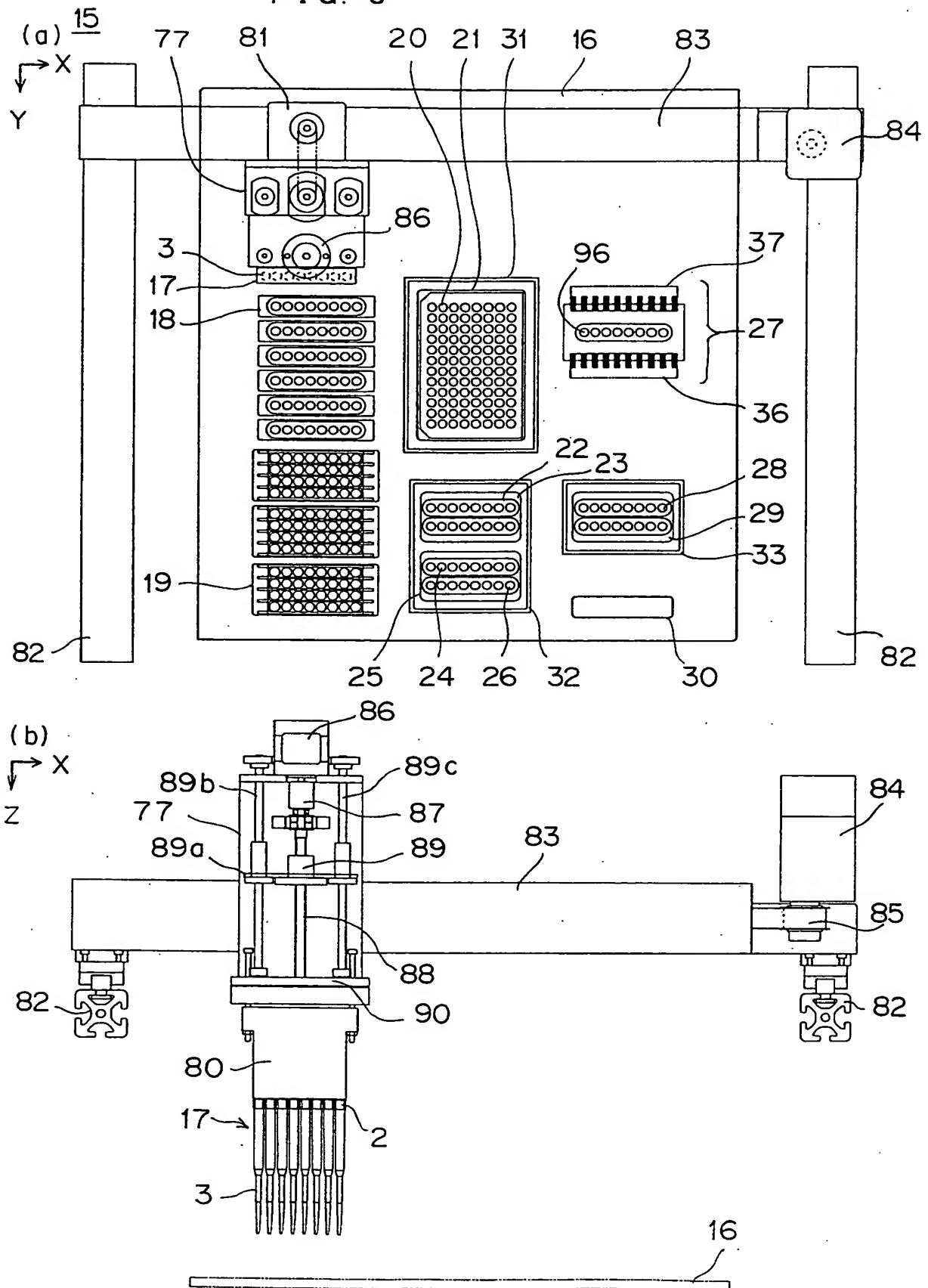


FIG. 4

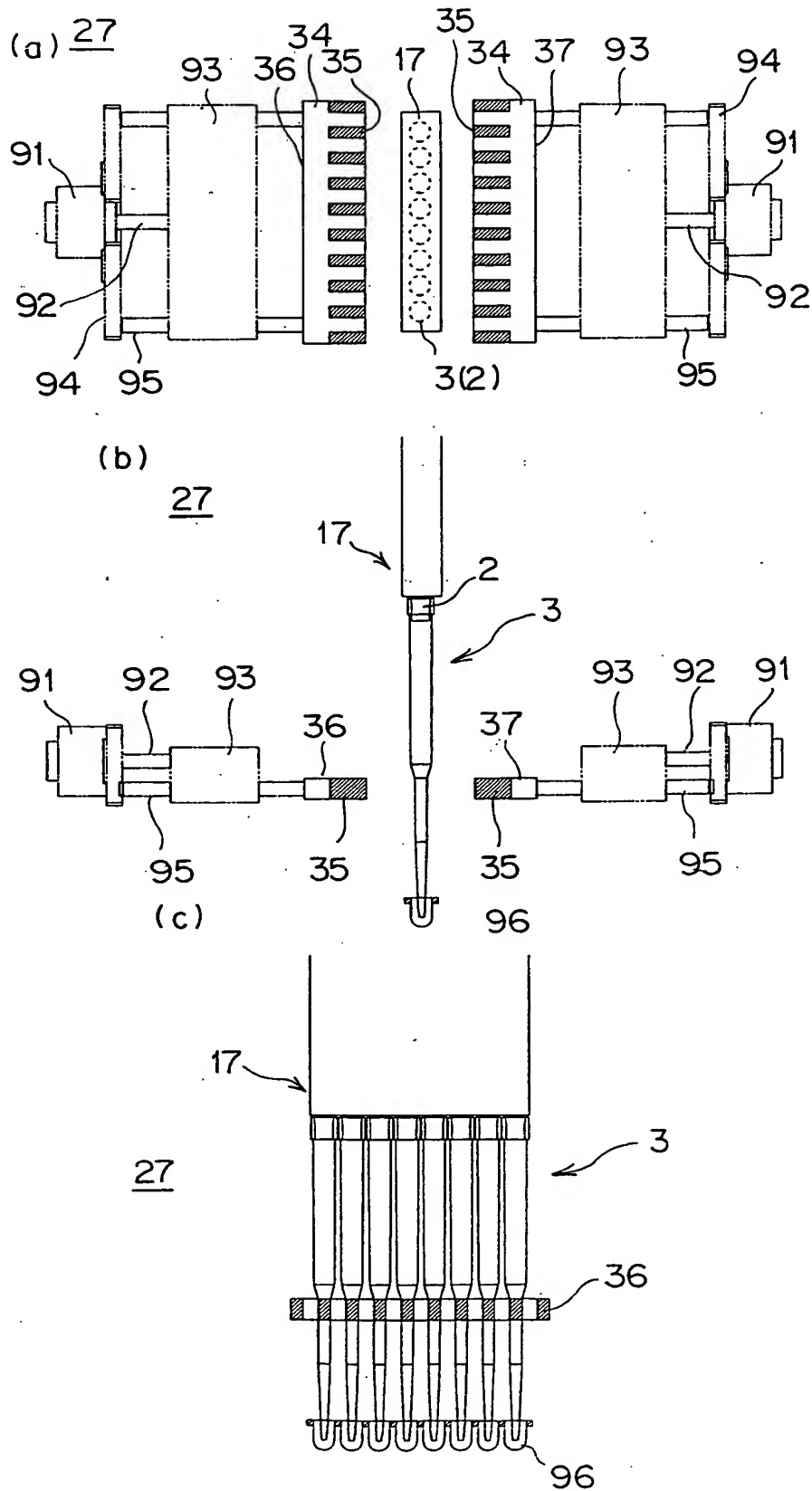


FIG. 5

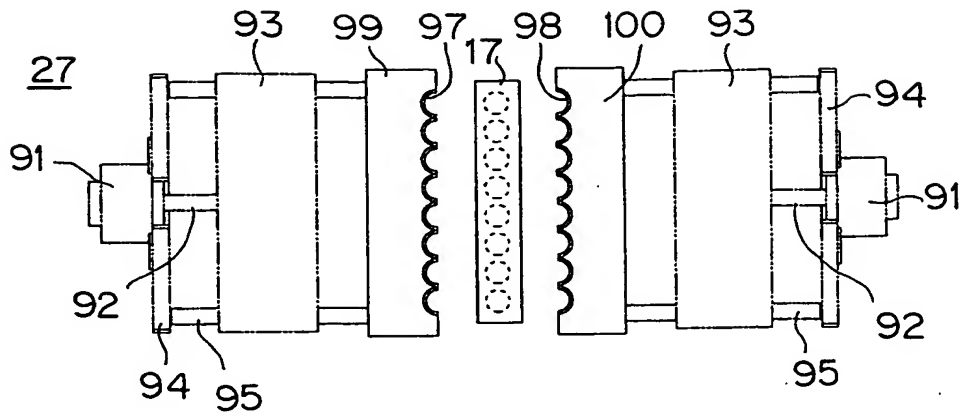


FIG. 6

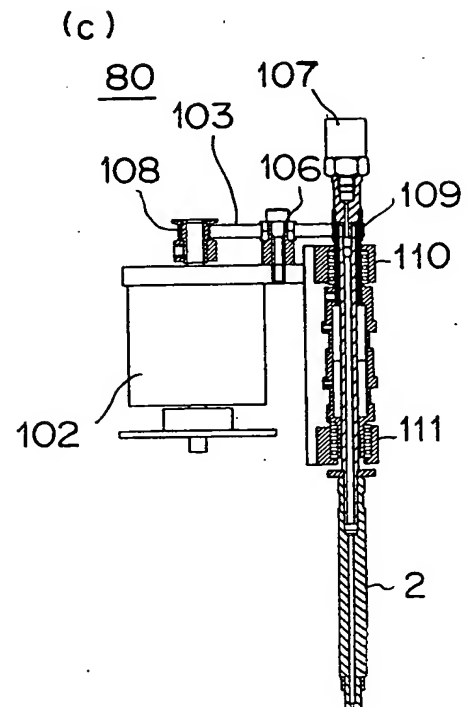
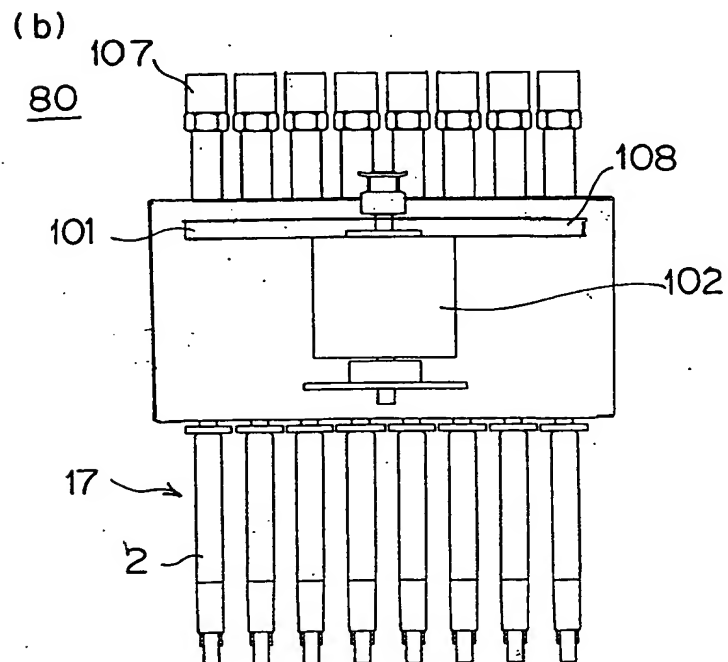
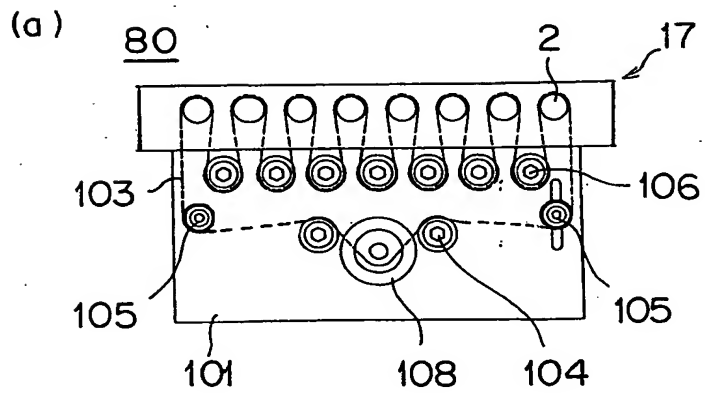


FIG. 7

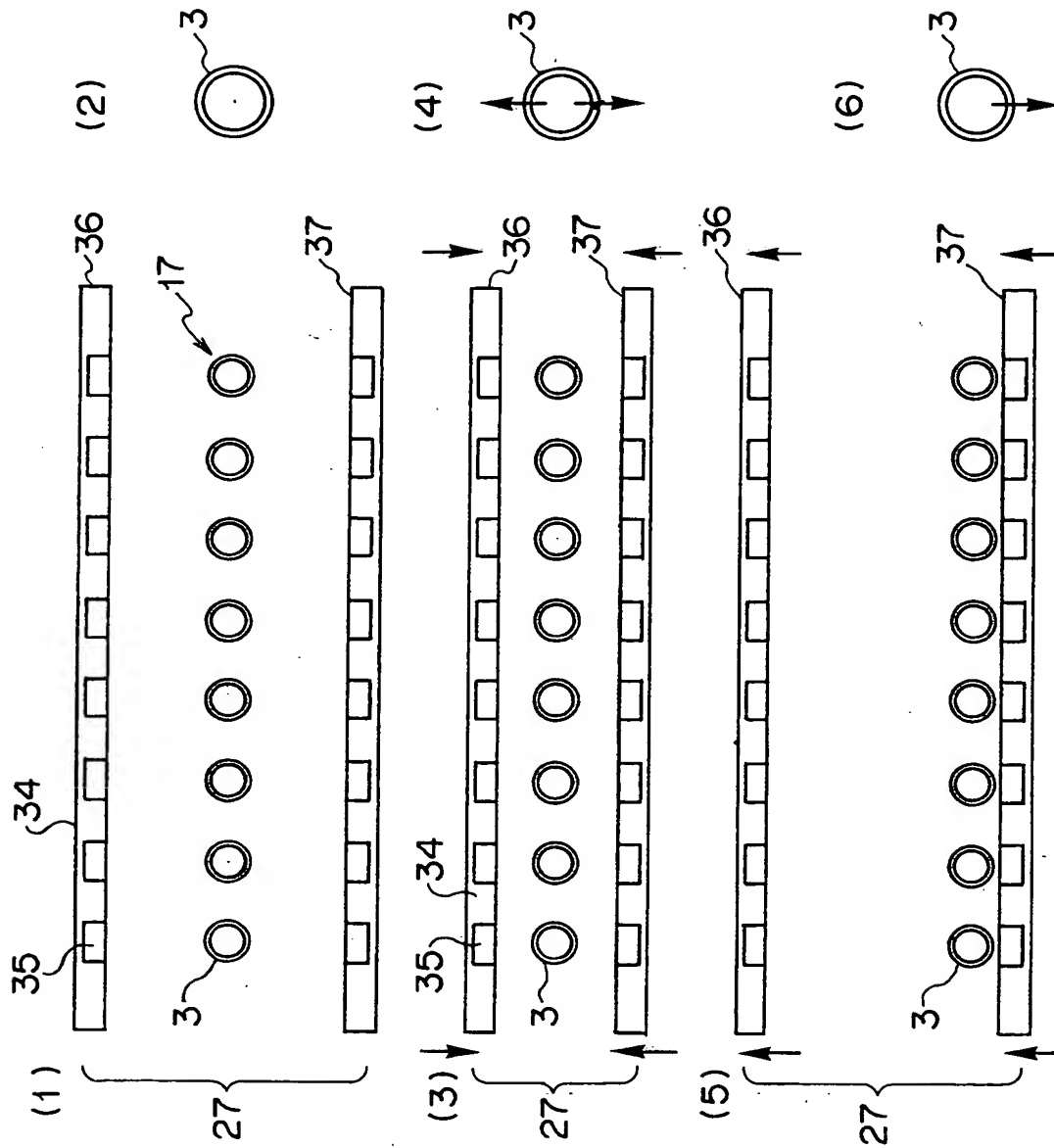


FIG. 8

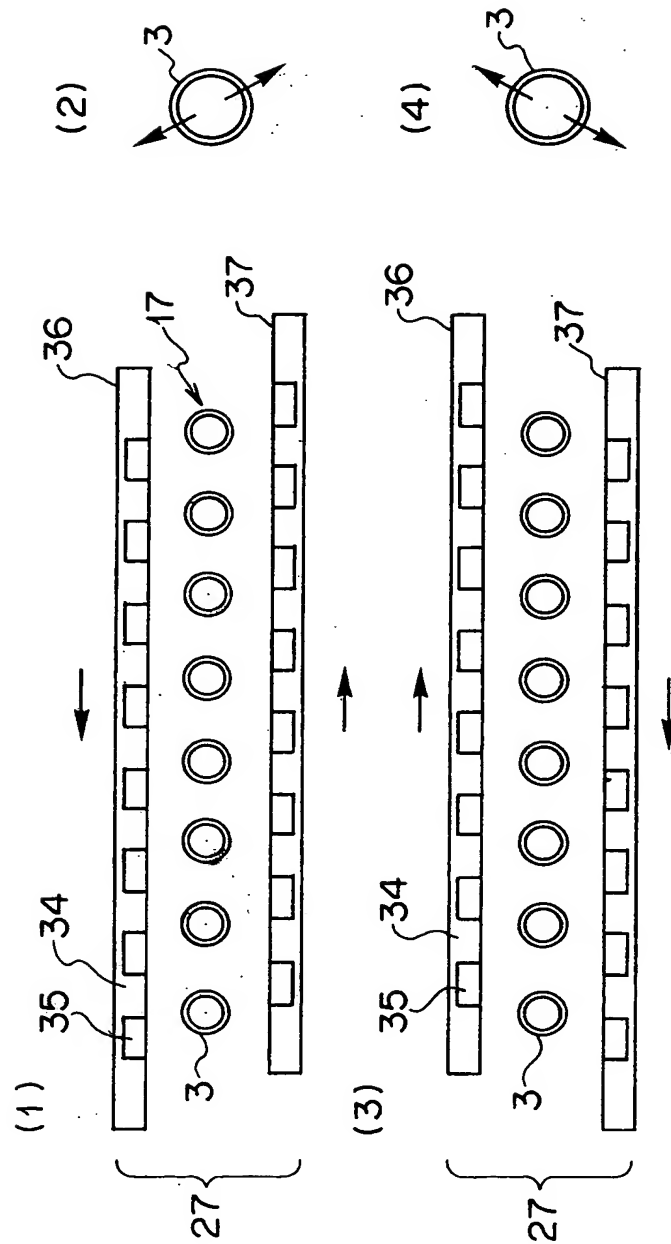


FIG. 9

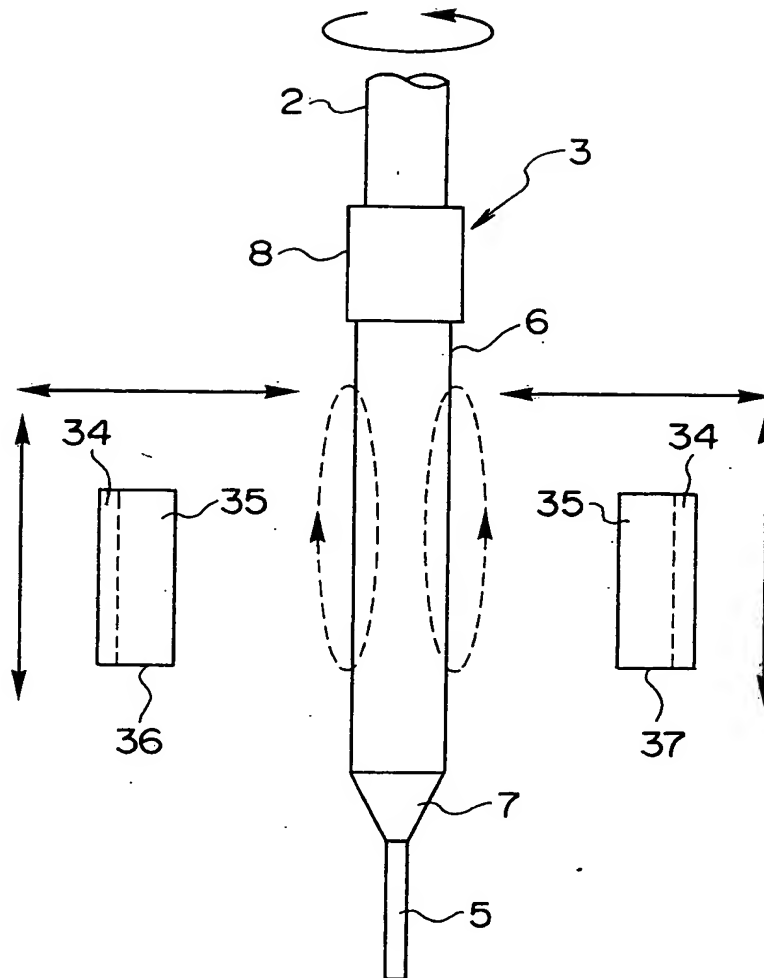




FIG. 10

(1)



(2)



(3)



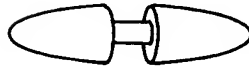
(4)



(5)



(6)



(7)

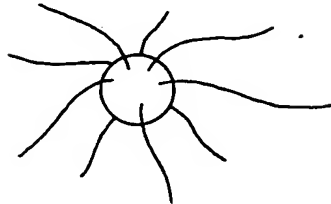


FIG. 11

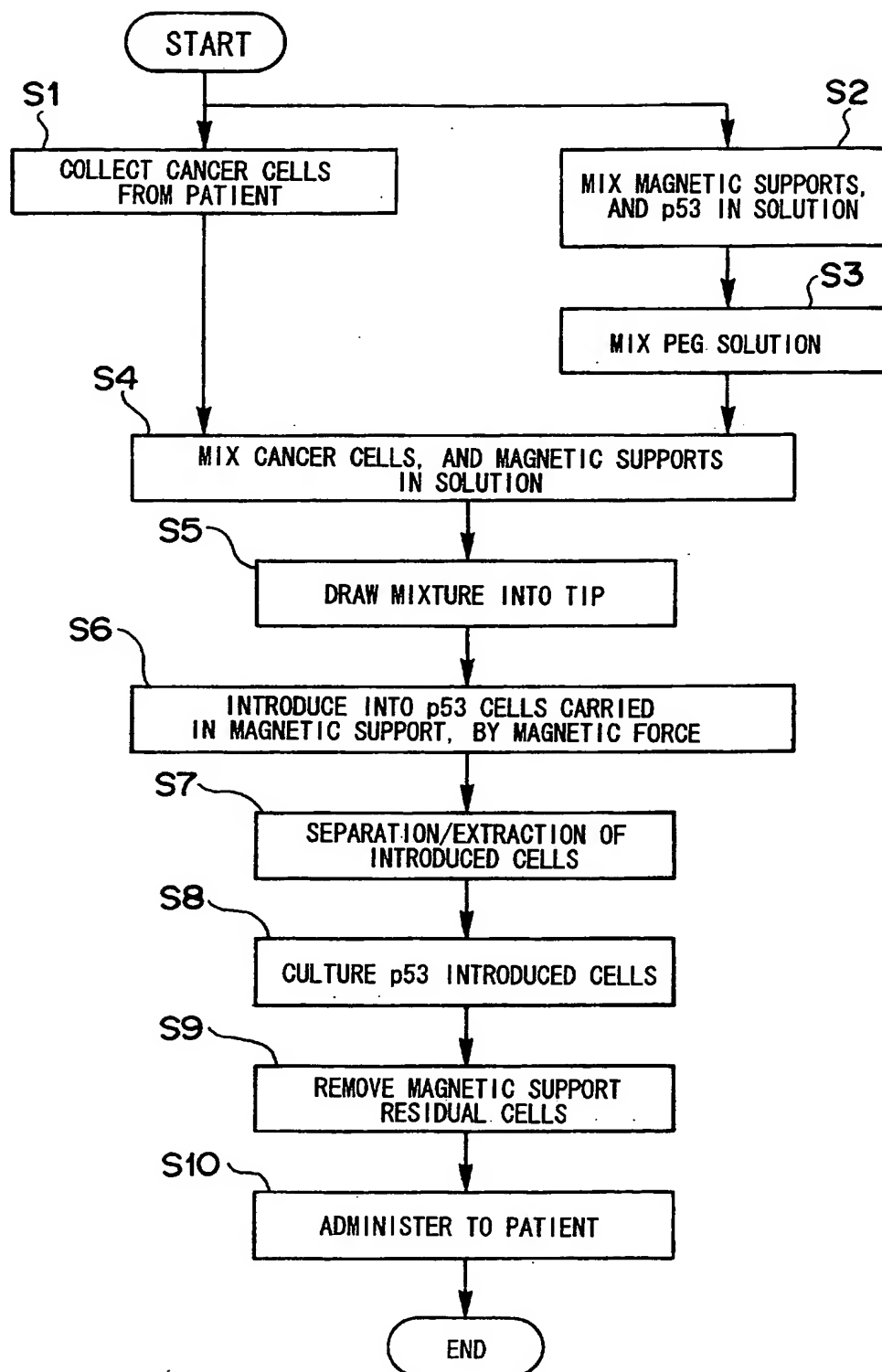


FIG. 12

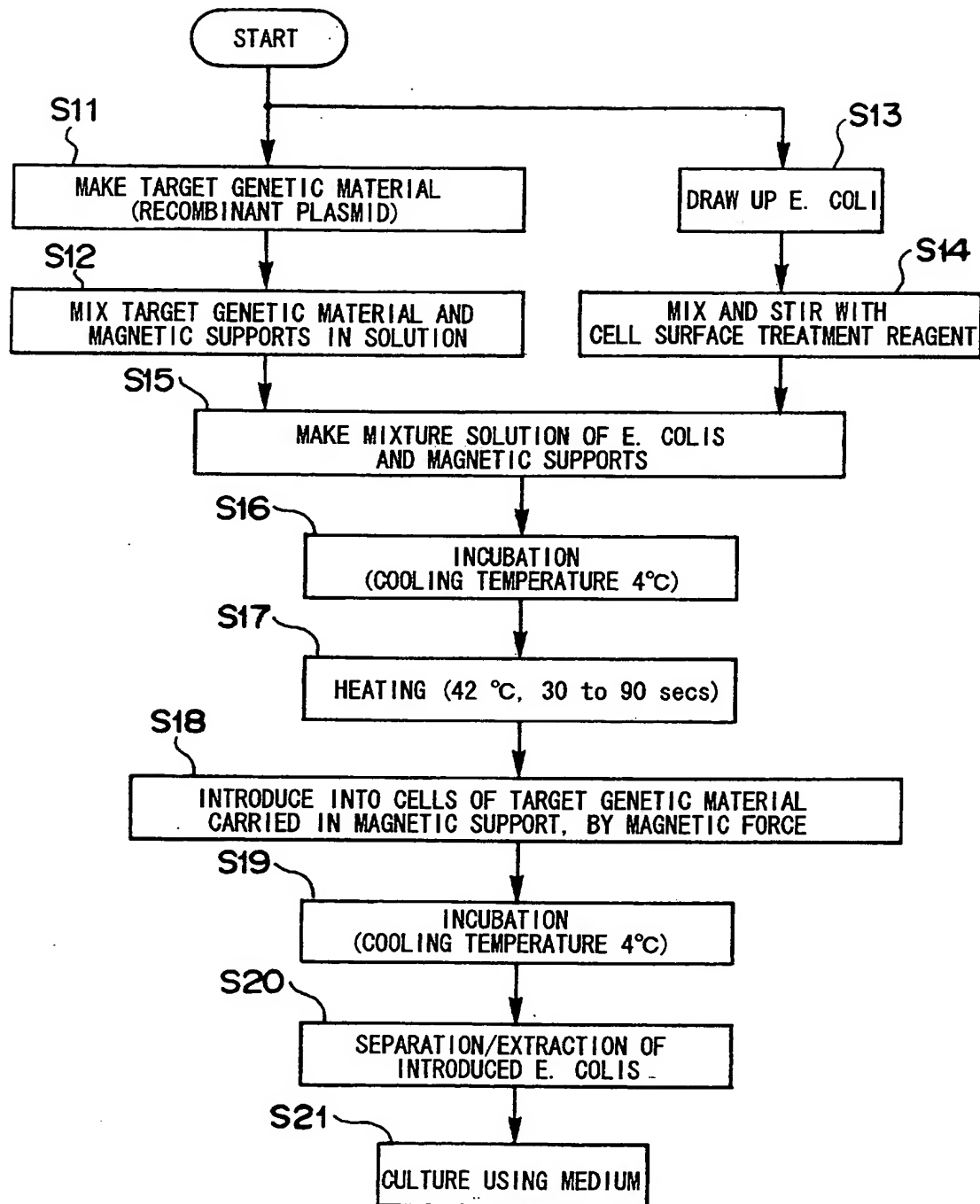


FIG. 13

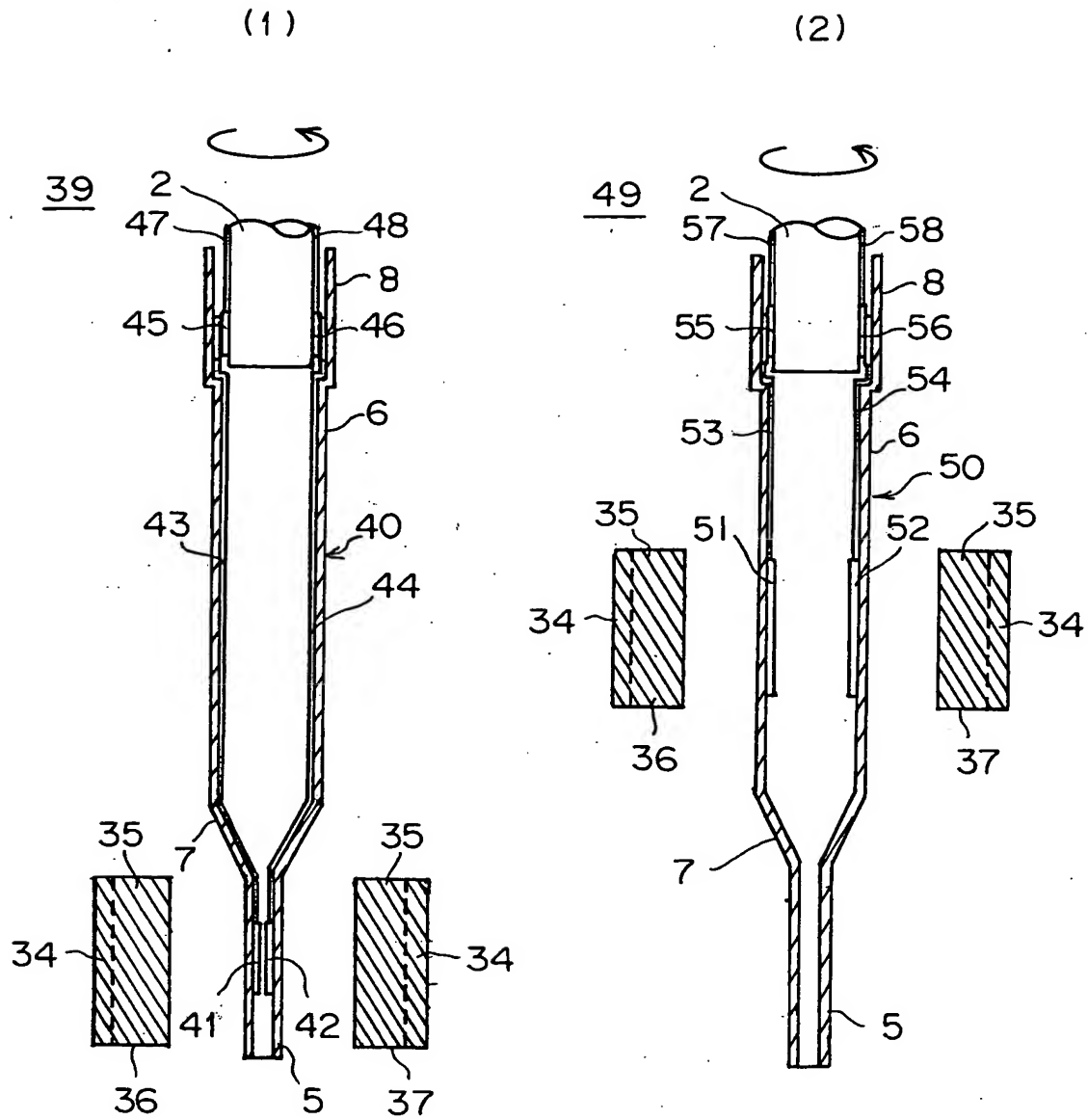


FIG. 14

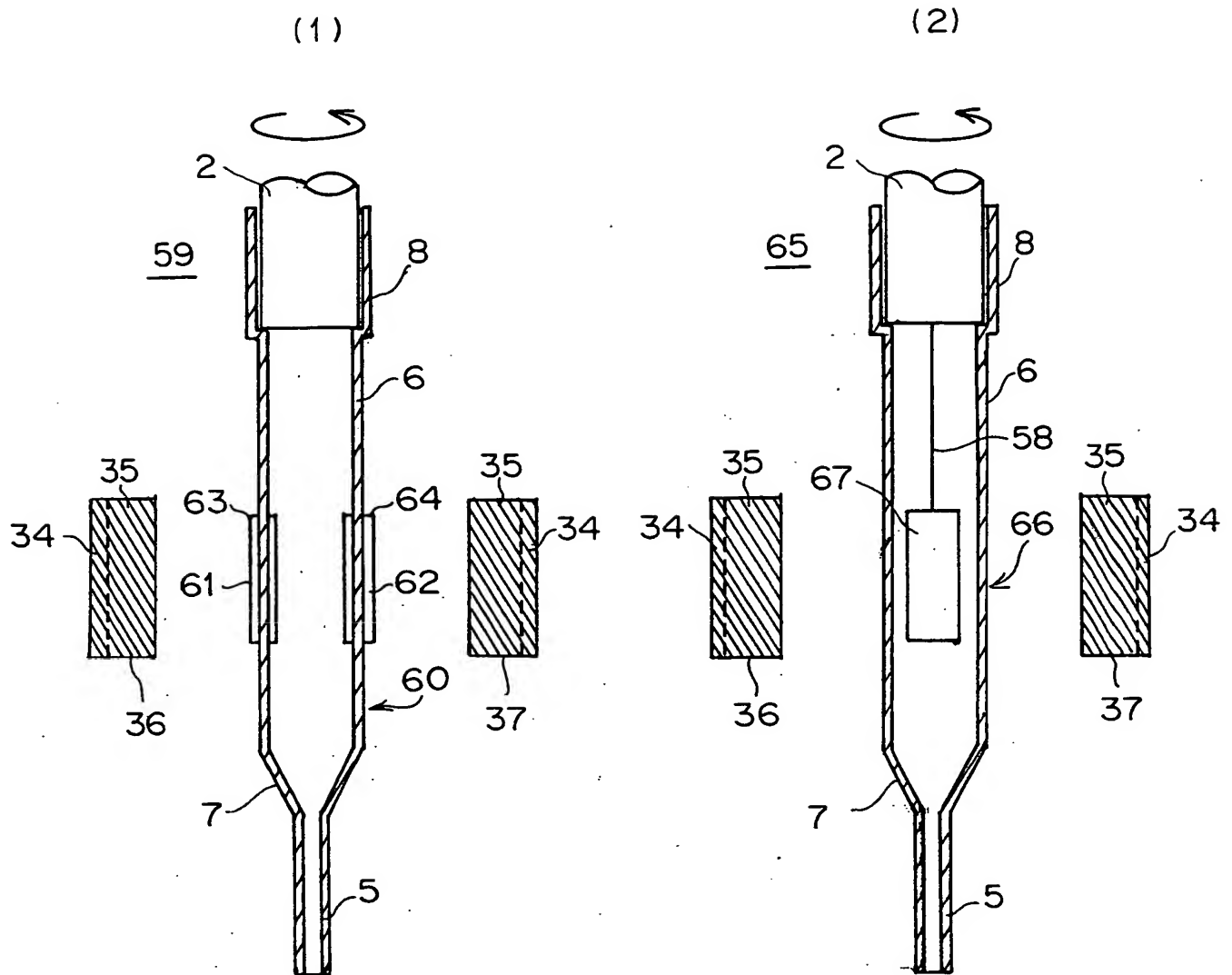
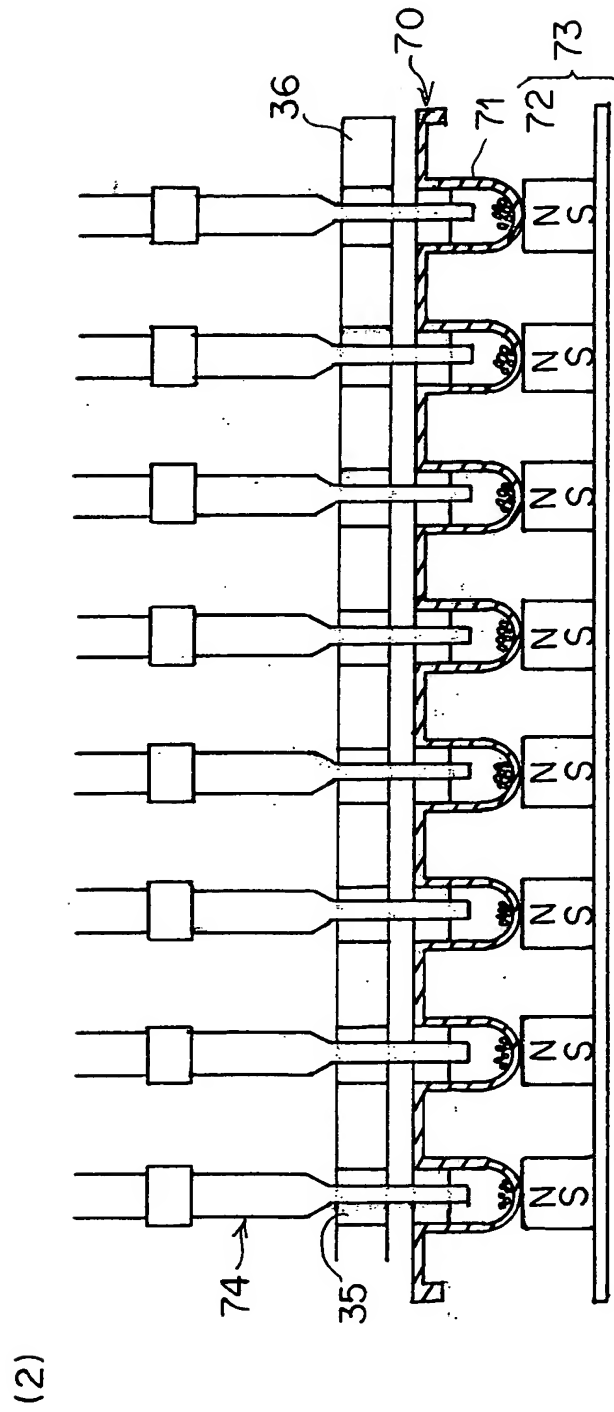
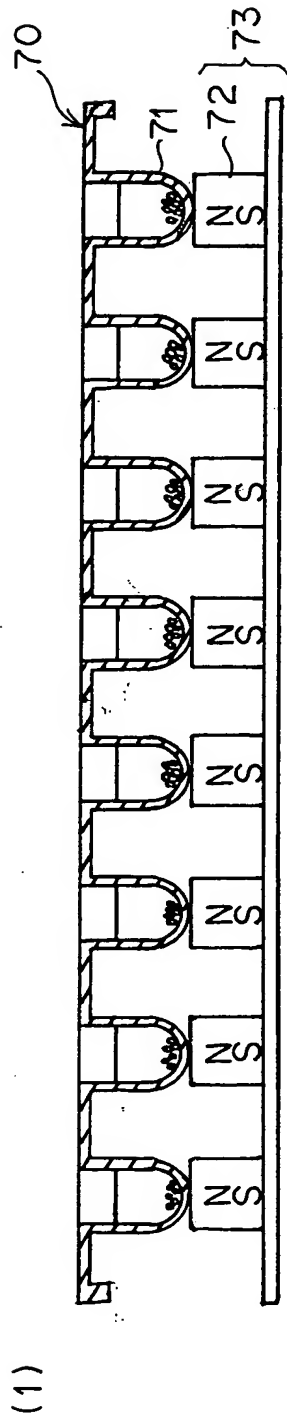


FIG. 15



- 1, 14 ... Apparatus for introducing a biological material
- 2 ... Nozzle
- 3, 40, 50, 60, 66 ... Tip
- 4 ... Annular permanent magnet
- 5 ... Liquid passage
- 6 ... Storage unit
- 13 ... Magnetic support layer
- 17, 39, 49, 59, 65 ... Nozzle unit
- 27 ... Magnetic force treatment unit
- 31, 32, 33 ... Heated / cooled area
- 36, 37 ... Linear magnetic sources
- 41, 42, 51, 52, 61, 62 ... Electrodes
- 67 ... Ultrasonic oscillator